AZDEN®

2m FM TRANSCEIVER

PCS-6000H

INSTRUCTION MANUAL

JEBradley 890

WA4A00

JAPAN PIEZO CO., LTD.

INTRODUCTION

Congratulations! Now you are the owner of the most advanced state-of the-art VHF FM transceiver available today.
Please read this manual carefully before attempting to operate your PCS-6000 transceiver. This will ensure that you obtain the maximum operating convenience and versatility.

Unpack your PCS-6000 carefully and make sure that it is supplied with the standard accessories listed at page 14 . Be sure to send in the warranty card. Notify the carrier immediately if there is any evidence of damage to the unit. Keep the original packing materials in the unlikely event it becomes necessary to return the PCS-6000 for servicing.

CONTENTS

- CAUTIONS BEFORE OPERATION -

1. Before connecting the unit to a power supply, make sure that you have the polarity correct. The red lead of the power cord should go to the positive (+) terminal of the power supply or battery.
   In mobile instllations, the system must normally be negative-ground. That is, the negative terminal of the battery should be connected to the automibile chassis. Most modern cars and trucks are negatively grounded, but a few use positive grounding. In this case, the PCS-6000 and antenna must be insulated from the vehicle chassis or a short circuit will occur.

2. The rated supply voltage of this unit is 13.8VDC ± 15%. So, be sure that the power supply voltage is 12 to 14V. Voltages less than 11.7VDC or greater than 15.9VDC will cause improper operation and possible damage to the unit.

3. Be sure that the antenna is securely mounted on your car and also check the external antenna system for short-circuit using an ohmmeter and then, firmly screw the antenna plug into the antenna connector on the rear panel of the unit. Be sure to use a 50-ohm impedance cable.

4. Be sure that the unit is properly located.
   When installing it, be sure that it is not placed in a location where it will be exposed to direct sunlight for prolonged periods. Also keep the unit well away from heater outlets.
   After parking for long periods in hot weather, the PCS-6000 should not be used for transmitting until the vehicle interior has cooled down.

- MAJOR FEATURES -

1. C-MOS Microcomputer Control

The built-in microcomputer employs the latest in CMOS technology, to provide
you with unprecedented operating features. This microcomputer controls all of
the scanning, channel selection, offset frequencies ,sub-audible tone
operation and display functions.
The lithium battery ensures that microcomputer information is
stored even when power is removed.

2. Unprecedented Wide Frequency Coverage

The PCS-6000 receives 118.000 to 173.995MHz aircraft AM and FM and transmits
140.100 to 149.995MHz. Modifiable to all MARS and
CAP frequencies (Proof of authorization/licence required)

3. AM Air Band Receiver Capability

The unit receives AM band of 118.000 to 135.995MHz.

4. 20-Channel Memory in Two Banks plus 1 Temporary Channel

Two memory banks, A and B have 10 memory channels each. The memories store
frequency, shift width, offset information, and
sub-audible tone frequency as programmed. An extra memory channel (that we
call TM - Temporary Memory) is provided to allow you to store
any operating condition right at once.

5. Versatile Scanning Functions

Dual memory scan, programmable band scanning , hold scan and
delay scan functiions are provided. The operations are detailed
in the keyboard operation.

6. Priority Channel Monitoring

Memory channel A0 (the first channel in memory bank A) is monitored at every
four seconds regardless of any operating condition.
When a signal is received, a beep will be heard twice.

7. Programmable Frequency Steps

In memory, frequency steps can be set at 5kHz to 20kHz increments of 5kHz.
(European version programmable at 12.5kHz to
50kHz in increments of 12.5kHz.)

8. Built-in Programmable Tone Encoder

57 different tones are built in and tone frequencies can be pro-
grammed into each memory channel.

9. Feather-touch Tuning Control Keyboard

The LED backlighted light touch keyboard performs all tuning operations
simply by pushing the key(s) and key actuation is audibly verified.

10. Large LCD (Liquid Crystal Display)

The LCD shows the operating frequency, S/RF , memory channel in use and
various other operating functions. The LCD is back-lighted by green LEDs,
making it possible for you to read the display even in total darkness.

11. Azden Traditional Discriminator Scan Centering

A B 8ch TONE PRI HOLD LOW REV
F 188 8.888 S DUP +- AM MHz
M.MODE BUSY TX S/RF

FM TRANSCEIVER AZDEN

PCS-6000

POWER

SQL

T·SQ VOL

MAO A/B
H/L SHIFT
SCN PRI
T·M WR TONE
T·M REV
PROG [WR]
M.MODE MHz DOWN ▼ MHz UP ▲ F
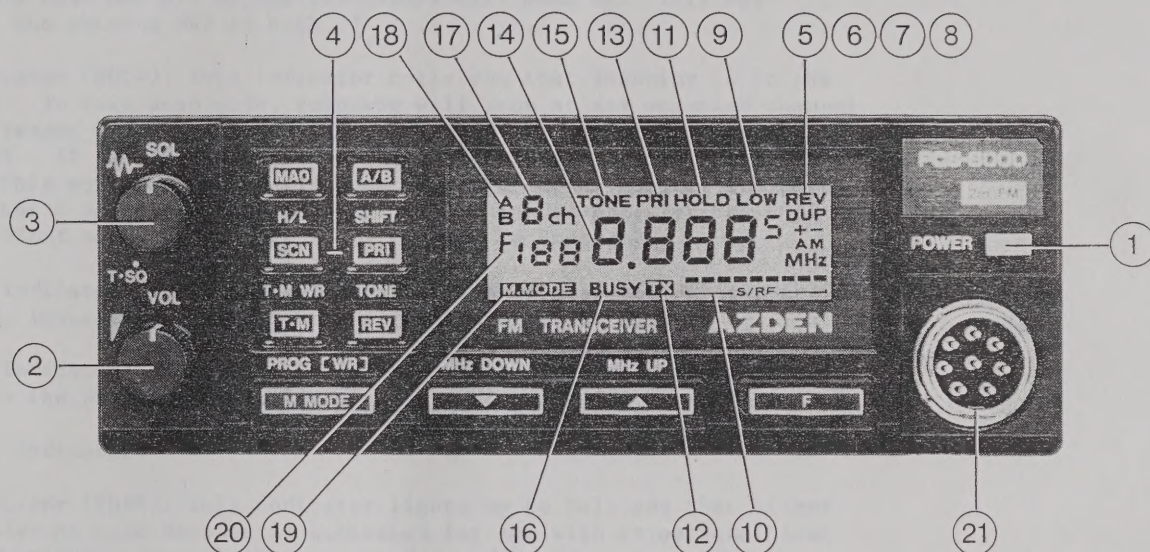
(1) Power Switch: Push 'ON' Push 'OFF' switch. Pressing the button once
    will turn the power ON and pressing it again will turn the power Off.

(2) Volume Control: Turning the knob clockwise will increase the sound volume.

(3) Tone Squelch(T·SQ)/Squelch Control. This control is used to eliminate an-
    noying background noise when no signal is present. To adjust the control
    properly for reception, first turn the knob counterclockwise until back-
    ground noise is heard. Then rotate it slowly clockwise untill background
    just disappears. Leave the knob at this position for normal use.
    If the squelch control is turned further clockwise, stronger signals will
    be required to open the squelch and allow reception.
    When the knob is set to the "T·SQ" position, the squelch will open only
    for signals that accompanys a certain designated subaudible tone fre-
    quency. (An optional tone squelch unit is required)

(4) Keyboard Switches: The keyboard switches are used to select various ope-
    ration modes programmed inside the microcomputer. All the key are LED-
    illuminated for easy location in darkness. Refer to "Details of Key-
    board" for each key operation and function.

(5) Minus(-) Shift Indicator: When the indicator is lit, transmission occurs
    at a frequency below the receiving frequency, according to the preset
    value of shift.

(6) Plus(+) Shift Indicator: When the indicator (+) is lit, transmission
    occurs at a frequency above the receiving frequency, according to the
    preset value of shift.

(7) Duplex ("DUP") Indicator: When the indicator (DUP) is lit in calling
    memory channel, it means that the receiving frequency and transmitting
    frequency is differently set up from each other.

(8) Reverse Mode Indicator (REV): This indicator is lit when the reverse-operation mode is in use. (See: Reverse mode operation Page 7)

(9) Low Power Indicator (LOW): When the transmitter output is set at low power (5W-PCS-6000/10W-PCS-6000H), this indicator comes on. In the high power mode (25W - PCS-6000/45W - PCS-6000H), this indicator is not lit.

(10) Signal Indicator (S/RF): This indicator shows the relative incoming signal strength in the receive mode, and the relative transmitter output power in the transmit mode. (Note: Even in high power transmit mode, it is possible that not all of the indicators will come on. This may happen if the antenna SWR is high .)

(11) Hold Indicator (HOLD): This indicator tells you that scanning is in the HOLD mode. In this scan mode, scanning will stop at any occupied channel and will resume in either about 3 seconds or 6 seconds after the signal disappears. If the HOLD scan is not lit, the unit is in the DELAY scan mode. In this mode, scanning will stop at any occupied channel and then resume after 6 seconds irrespective of signal condition. For the HOLD mode and DELAY mode switchover, refer to "How To Program".

(12) Transmit Indicator (TX): This indicator lights up when the PTT switch is depressed, indicating that the unit is in the transmit mode.

(13) Priority Indicator (PRI): This indicator lights up to tell you that the unit is in the priority mode. (See Priority at page 12)

(14) Frequency Indicator

(15) Tone Indicator (TONE): This indicator lights up to tell you that either tone encoder or tone decoder is activated for use with an optional tone decoder when built in or both tone encoder and decoder are made activated. More specifically, see the table below as regards the 'TONE' indicator v.s. tone encoder/decoder, keyboard tone switch and tone squelch switch.

| TONE | | 'TONE' Indicator | |
Encoder	Decoder	Tone Switch	T.SQ Switch
x	x	x	x
x	o	x	x
o	x	o	x
o	o	o	o
o: pre-programmed-in		o=Switch 'On'	

(16) Busy Indicator (BUSY): This indicator lights up when the unit is receiving signals over squelch threshold level, indicating that a channel is in use.

(17) Memory Address Indicator: This unit has two memory banks, A and B, each of which has ten(10) memories, indicating the memory address in use by 0ch to 9ch.

(18) Memory Bank Indicator: When memory bank A is selected, this indicator shows A and when bank B is selected, this indicates B. When both A and B are indicated, the blinking bank is selected, connecting A and B banks in series and enabling you to call 20 channel frequencies continuously and or scan 20 channels.

(19) Memory Mode Indicator (M Mode): This indicator lights up when the PCS-6000 is in the memory mode. In this mode, the up/down keys function as memory address keys, and the scan key as memory scan key. When the indicator is not lit, the unit is in the up/down mode.

(20) Function Indicator (F): This indicator will light up when the 'F' key (function key) is depressed, allowing each key to operate as indicated on each keytop.

(21) Control Microphone Connector: This is used to connect the control microphone supplied with the unit. For details of the microphone, refer to page 13 .

- How To Use Keyboard -

1. Setting Frequencies: Before attempting to set frequencies, check to see whether or not the unit is in the memory mode(M MODE lit or not). If M MODE is lit, press the M MODE key once to release the memory mode and return to up/down mode. You can set or change frequencies by the UP and or DOWN keys.

   When the UP key is pushed once, the operating frequency is moved up by 5kHz, and when the DOWN key is pressed, the frequency is moved down by 5kHz. Channel frequency step is variable to 10kHz, 15kHz and or 20kHz by following the program procedure given at page 9 .

2. Rapid Channel Change...(UP, DOWN): The frequency is automatically changed up or down by holding down the UP or the DOWN key for more than about a second. As the desired frequency is approached, release the key and then push the UP or DOWN key repeatedly until the desired frequency is obtained.

3. MHz unit Change: When the function key 'F' is pressed and Function Indicator F(20) is indicated, pressing either the UP key or DOWN key once will move up or down the operating frequency by 1MHz.
   Note: 1) The 'F' indicator is released by any of the key operation other than MHz Frequency Change and Shift Direction Change procedures.
         2) The 'F' indicator is automatically released in about 3 seconds unless other key is pressed after the 'F' is pushed.
         3) The 'F' indicator is released by pressing the 'F' key.

4. Transmit Output Change: Press the 'F' key to light up the "F" indicator. Then press the 'H/L' key to select the high power output 25W/45W(PCS-6000/ PCS-6000H) and or the low power output 5W/10W (6000/6000H). The Low Power Indicator (9) comes on when the transmit output is set at low power.

5. Setting Shift Width and Direction: When 'F' indicator comes on after the
   'F' switch pressed, pressing the 'SHIFT' key will indicate +(6) that means
   transmission occurs at 600kHz above the receiving frequency. Furthermore,
   when the 'F' indicator on, pressing the 'SHIFT' key will indicate -(5) that
   means transmission occurs at 600kHz below the receiving frequency.

   The plus and minus shift is not activated in the M.(Memory) Mode.
   Shift width other than 600Hz can be programmed to any optional
   value. Refer to 'How To Program' at page 9 .
   Note: When the M Mode indicator is lit, shift key operation is disabled.

6. Reverse Mode Operation (REV): When the 'REV' key is pressed and 'REV'
   is indicated on the display during repeater operation, the transmit and
   receive frequencies are reversed. To disable the reverse mode operation,
   push the REV key again and the REV indicator is turned off to indicate that
   the reverse mode is disabled.

7. How To Operate Tone: When 'F' indicator is lit (after the 'F' switch is
   pushed), pressing the TONE key will activate tone encoder and the 'TONE'
   is indicated on the display. Repeating the same procedure will turn the
   TONE off and the TONE indicator comes off.
   Note: 1) The tone key operation is disabled when tone code(s) are not
            programmed in the computer.
         2) Refer to 'How To Program' for tone code programming.
         3) The tone function is automatically activated when the tone code
            is pre-programmed in memory channel.
         4) Use the 'TONE' key to disable tone operation.

8. How To Store Frequencies in Memory:

- Setting Receive Frequency and Tone Code Entry -
  a) Pressing the function(F) key and the program(PROG) key will set the unit
     in the program mode and the 'A0' blinks and indicates that you can write
     frequency in the MA0(memory bank A, address channel 0).
  b) Select the memory address desired from among 0 through 9 by the UP or
     DOWN key.
  c) Press the M MODE key and you will see that the receiving frequency dis-
     play flickers.
  d) Select a frequency to be stored by using the UP, DOWN, and F keys.
  e) Push the M MODE key and then the frequency will be stored in the spe-
     cified memory.
  f) - Sub-audible Tone Code Entry-: After the e) procedure above, you will
     see that the TONE indicator flickers for tone code entry. Tone code can
     be selected by the UP/DOWN key. Tone code entry is completed by
     pressing the M MODE key. (An optional tone squelch unit is requied).
     Note: When the unit is provided with an optional tone squelch unit,
           refer to the tone squelch unit code table.

- Setting Transmit Frequency and Tone Code Entry -
  a) After the above tone code entry completion, you will see that the tran-
     mit indicator(TX) and transmit frequency flicker. In this case, the fre-
     quency displayed is the same as that of the receiving frequency.
  b) Just push the M MODE key when you want both the transmit and receive
     frequency to be the same.
     But if you want to set a different transmit frequency from the receive
     frequency, select the desired transmit frequency by using the UP, DOWN,
     and 'F' key and then press the M MODE key to complete the transmit fre-
     quency entry in the memory.
  c) You will see then that both the TONE indicator and TX indicator flic-
     ckers.
  d) Select the tone code desired by the UP/DOWN key. Refer to the PL TONE
     CODE table as below and the option tone squelch unit table when the
     unit provided with the tone squelch unit.
     Note*: Shifted frequency is displayed when the shift is set to + or -
            before the unit is set in the program mode.

- Tone Code Table -

Code	Freq.(Hz)	Code	Freq.(Hz)	Code	Freq.(Hz)	Code	Freq.(Hz)
01	67.0	16	114.8	31	192.8	46	1,700
02	71.9	17	118.8	32	203.5	47	1,750
03	74.4	18	123.0	33	210.7	48	1,800
04	77.0	19	127.3	34	218.1	49	1,300
05	79.7	20	131.8	35	225.7	50	2,000
06	82.5	21	136.5	36	233.6	51	2,200
07	85.4	22	141.3	37	241.8	52	2,975
08	88.5	23	146.2	38	250.3	53	2,550
09	91.5	24	151.4	39	500	54	2,295
10	94.8	25	156.7	40	600	55	2,125
11	97.4	26	162.2	41	700	56	1,275
12	100.0	27	167.9	42	800	57	1,445
13	103.5	28	173.8	43	900		
14	107.2	29	179.9	44	1,000		
15	110.9	30	186.2	45	1,600		

Note: When the unit is provided with an optional tone squelch unit,
      tone codes are different from the above and refer to the tone
      squelch unit code table.

After a round of procedures for storing the receiving and transmitting frequencies and tone code, the Memory Address Indicator flickers showing the next channel. By repeating the same procedures as above, you can store receive frequencies, receive tones, as well as transmit frequencies and transmit tones in the memory bank A0 through A9 and memory bank B0 through B 9 for a total of 20 channels.

After the tone code is entered in the B9 memory channel, the unit is in the Up/Down mode for setting tone, shift width, delay scan and frequency stop other than in the memory channels.

1. The receiving tone code will be indicated by entering tone code number. Press the M MODE key and the TONE indicator will flicker. Select any desired tone code by the UP/DOWN key and push the M MODE key to complete the entry.
   Note: This procedure is not required unless the unit is provided with the tone squelch unit.

2. By the transmit tone code number, the transmit tone code will be indicated. Pushing the M MODE key to let the indicator flicker. Then, select tone code desired by the use of the UP/DOWN key and push the M MODE key key again to complete the entry.

3. Scanning Mode: The "3   00" appears on the display, indicating that the unit in the Delay Scan mode.
   Pushing the M MODE key and the indicator will flicker. Select either "3" or "6" by the UP/DOWN key and press again the M MODE key to decide 3 seconds or 6 seconds HOLD mode.

4. Frequency Step: The display is indicated as "4 .   5Mhz" to denote that the up/down frequency step is set to 5kHz. Pressing the M MODE key will indicator flicker. Select the desired frequency step from among "5" (5kHz), "10"(10kHz), "15"(15kHz) and "20"(20kHz) by the UP/DOWN   key and press the M MODE key to decide the frequency step.

5. Shift Width: The display indicates "5 .600MHz" that means shift width is 600kHz. Press the M MODE key to let the indicator flicker and select any desired shift width by the UP/DOWN key and press the M MODE key again to complete the shift width setup.
   The unit then returns to the initial program mode status and 'A0' will flicker.

The above will complete all the program setting procedures.
To release the program mode, be sure to turn the POWER off.

Note: When the unit is in the program mode, the M MODE key accepts memory and program entry even if 'F' is indicated.

Recalling Memory Channels

1) Calling 'MA0': The 'MA0'(memory bank A, address 0 channel) is called
   when the power is turned "ON" or when the program mode is released.

   If the 'MA0' has already been called by the 'MA0' key, the unit re-
   turns to the status before the MA0 was pressed.

   When the MA0 is already called by other key operation than the MA0
   key, press the MA0 key again to call MA0 channel.

2) Memory Address Change: The MA0 is called when the power turned 'ON'
   or the program mode is released.
   When the M MODE indicator is lit, use the UP/DOWN key to change the
   memory address and call a channel to be selected from among 0 through
   9.

3) Memory Bank Change: The memory bank is selected by the 'A/B' key.

   " A "(A blinking) indicates that the memory bank A is called in the
     B   continuous A-B mode.

   A and B memory bank is respectively called when "A" and "B" is indi-
   cated respectively.

4) Memory Mode: The unit is in the memory mode when the 'M MODE" is indi-
   cated on the display. The Memory Mode key is used to select either
   Memory Mode or UP/DOWN mode.

5) Temporary Memory (T.M): Depressing first the 'F' and then 'T.M WR'
   (Temporary Memory Write) allows you to store the content indicated
   on the display in memory. The Temporay Memory function is disabled
   when the unit is in the program mode.

   Depressing the TM key will call the content stored in the temporary
   memory. In this case, the'M. MODE',Memory Bank and Memory Address
   indicators disappears. Pressing the TM key again will allow the unit
   to return the status before the temporary memory content was called.

   When you carry out the UP/DOWN operation after calling the T.M content
   the unit returns to the UP/DOWN mode and allows you to move up or
   down from the frequency stored in the temporary memory. In this case,
   the M MODE indicator disappears and the Memory Bank Indicator and Memo-
   ry Address Indicator come on. Also the tone frequency will be what is
   entered in the UP/DOWN mode.

   NB: Tone operation is activated when the tone code information has al-
       ready been entered and then the temporary memory is stored .

Memory Scanning

Memory scanning is initiated by pressing the SCN key while the unit is in
the memory mode.(M MODE is lit). The scan will start at the channel fol-
lowing the one indicated on the memory address. That is, if you are at
memory address 5 and press the SCN, scanning will begin at address 6.
- When Memory Bank "A" is indicated -
Scanning occurs only in memory bank A. The sequence is;

A0ch, A1ch, A2ch........., A9ch, A0ch, A1ch,.

- When Memory Bank "B" is indicated -
Scanning occurs only in memory bank B. The channel scanning is in the same
sequence as that of the memory bank A scanning.

- When Memory Bank "A-B " is indicated -

Scanning occurs in both banks alternately. The sequence is;
A0ch, A1ch, A2ch,......, A9ch, B0ch, B1ch, B2ch,....,B9ch,
A0ch, A1ch, A2ch,...

Note: 1) Memory bank A or B is selected by the A/B key.
      2) In the A-B continuous scanning mode, A will flicker during the
         A bank scanning and B will flicker during B bank scanning.

Band Scanning

By pressing the SCN key during the UP/DOWN mode(without M MODE indication),
a specified frequency band between two frequencies stored in channel A8 and
A9, B8 and B9 or, both , according to memory bank indication A, B and or
both, and frequency step pre-programmed in.

Band scanning takes place at about 8 channels per second. The lower limit
frequency should normally be stored in A8 or B8, and the upper limit fre-
quency in memory A9 or B9. When the frequency in memory address 8 is hi-
gher than that in address 9, band scan will begin at the lower limit fre-
quency, in other words, from the frequency stored in the Momory Channel
9 to that in the Memory Address 8.

When there is both AM and FM signals in the same memory banks, scanning
in the Bank Scan Mode is disabled, sounding a beep to indicate this is
an error, as shown below.

A8 AM   A9 AM
) Scanning is OK
B8 FM   B9 FM

A8 AM   A9 FM
) Scanning is disabled and a beep is
B8 FM   B9 AM   sounded to indicate a setting error.

Note: When scan stops at a busy channel, both A,B is indicated. But when
      scanning is stopped by pressing the UP/DOWN key, for instance, the
      memory bank indicator flickers, telling you that the bank flickering
      is in the A-B mode.

Scanning Stop
Scanning will be stopped, either in Memory Mode or UP/DOWN mode, by pres-
sing any of the keys or the microphone PTT switch. To resume the 'SCAN'
mode, press the 'SCAN' key. But be sure to note the following.

1) Push either UP or DOWN key to stop the scanning.
2) Scanning will be stopped by pressing other keys than UP/DOWN key.
   In this case, any key other than UP/DOWN will perform the function
   marked on the key button.
3) If the microphone PTT switch is used to stop scanning, press the switch
   a second time will initiate transmission. When scan is stopped at a
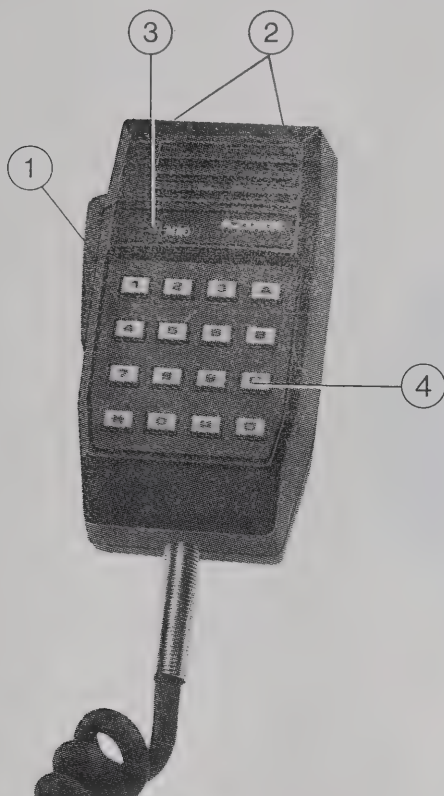   busy channel, transmission occurs immediately when the PTT is pressed.

Priority
Pressing the PRI key will initiate prority monitoring of the frequency
stored in memory channel AO and the PRI will be indicated on the LCD
display. The channel is monitored every four seconds for the presence of
a signal. If a signal appears over the squelch level at the frequency stor-
ed in AO, a beep will sound twice.
To release the priority mode, press PRI key again. The PRI indicator will
disappar.

Note: 1) The dual watch operation is not carried out when calling the
         AO channel alone.

      2) During the dual watch, transmisstion does not occur at the
         the Priority Channel (i.e. AO) even if the PTT switch is pressed.
         Be sure to press the PTT switch after calling MAO channel.

DTMF MICROPHONE   499-21*

Model 499-21 in a Dynamic Microphone with 16 key encoder and multi function.
This microphone is provided as a standard accessory for U.S. version.

(1) Push-to-Talk Switch Lever
To transmit, depress the Push-to-Talk
(PTT) switch and speak slowly and
clearly in your normal tone of voice
with the microphone about two inches
from your mouth. Depressing the PTT
switch turns the TX indicator Lite on
the LCD, indicating that the
transmitter is in operation.

(2) UP/DOWN Buttons
These UP and DOWN buttons function in
the same way as those of(▲UP)and
(▲DOWN)keys on the keyboard of the
unit's front panel.
Depressing the UP or DOWN button each
time, the frequency indicated on the
frequency indicator is changed by the
frequency step determined.
Holding either one of buttons for more
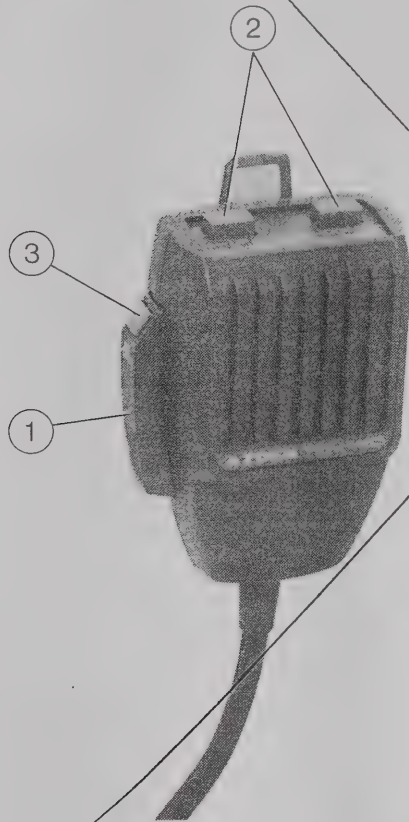than a second allows rapid frequency
change.

(3) MA 0 CALL Button
This CALL button has also the same
function as that of MA0 key on the
front panel key board.
By depressing the button, the frequency
stored in M0 memory on the bank A is
directly called up regardless of
current operation mode of the unit.
Thus quick access to the channel which
may be used frequently can be attained.

(4) DTMF KEY ENCODER PAD

The transceiver is put to the transmission mode by pressing the PTT knob, and
you can speak into the microphone. Release the PTT knob after transmission.
To enable the DTMF encoder function, press the keypad keys correctly in the
desired sequence. As each button is pressed, the LED will be light.
The transceiver is automatically put into the transmission mode when any
keypad key is pressed. The built-in "hang timer" causes the transmitter to
operate continuously if the delay between keystrokes is less than 2 seconds.

MICROPHONE PCM-463

A multi-functional microphone is provided as a standard accessory. (European version/Asian version.)

(1) Push-to-Talk Switch Lever
To transmit, depress the Push-to-Talk (PTT) switch and speak slowly and clearly in your normal tone of voice with the microphone about two inches from your mouth.
Depressing the PTT switch turns the TX indicator Lite on the LCD, indicating that the transmitter is in operation.

(2) UP/DOWN Buttons
These UP and DOWN buttons function in the same way as those of (UP) and (DOWN) keys on the keyboard of the unit's front panel.
Depressing the UP or DOWN button each time, the frequency indicated on the frequency indicator is changed by the frequency step determined.
Holding either one of buttons for more than a second allows rapid frequency change.

(3) MA 0 CALL Button
This CALL button has also the same function as that the MA0 key on the front panel key board.
By depressing the button, the frequency stored in M0 memory on the bank A is directly called up regardless of current operation mode of the unit.
Thus quick access to the channel which may be used frequently can be attained.

ACCESSORIES LIST

1. Microphone   499-21*   u.s. version 1
               PCM-463* (European version)
                        (Asian   ")

2. Microphone Hanger.......................................1

3. DC Power Cord (w/fuse)..................................1

4. Spare Fuse..1

5. Mounting Bracket..1

6. Screw for Bracket Mounting..............................2

7 Taping Screw...4

8. Owner's Manual w/schematic diagram......................1

* Microphones are subject to change without notice to an improvement or for
  manufacturers convenienss' sake.

SPECIFICATIONS

GENERAL

Frequency Coverrage	AM 118.000　135.995MHz (Rx) FM 136.000　173.995MHz (Rx) FM 140.000　149.995MHz (Rx/Tx) Note: Specifications guarantee 144 — 148MHz
Display	LCD
Frequency Control	Microcomputer-controlled PLL
Emission Type	FM (16F3)
Memory Channels	20 + 1 Temporary Memory
Power Requirement	13.8V DC ±15%, negatvie ground
Power Consumption	0.6A (receive) 6.0A maximum (transmit...high)
Operating Temperature	−10 to +50°C
Anntenna Impedance	50Ω
Microphone	D.T.M.F. Microphone (U.S. Version) with UP/DOWN, Memory call switch PCM-463A, Dynamic type 500Ω (European Version) with UP/DOWN, Memory call switch
Dimensions	2H × 5½W × 7¼D inch (50H × 140W × 182D mm)
Weight	3 lbs (1.4kg)

TRANSMITTER

RF Output Power	25 watts (high) 5　watts adjustable (low)
Modulation System	Variable reactance FM
Frequency Deviation	±5KHz maximum
Spurious Radiation	Better than −60dB
Offset	±600KHz, programmable
PL® Tone	Programmable (European Version: 1,750Hz)

RECEIVER

Receiving System	Double conversion superheterodyne
Intermediate Frequency	16.90MHz (first), 455KHz (second)
Sensitivity	AM: Better than 1μV for 10dB S/N FM: Better than 0.35μV for 20dB NQ FM: Better than 0.19μV for 12dB SINAD
Squelch Sensitivity	Better than 0.12μV at threshold
Selectivity	± 6KHz or more at 6　dB down ±15KHz or less　at 60dB down
Audio Output	2 watts or more (8Ω, 10% THD)

Notice: Specifications are subject to change without notice.

LIMITED WARRANTY

YOUR AZDEN TWO METER TRANSCEIVER HAS A ONE-YEAR LIMITED WARRANTY. THE WARRANTY IS ONE YEAR ON ALL PARTS EXCEPT THE FINAL POWER AMPLIFIER. ALL OTHER PARTS ARE WARRENTED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ORDER. LABOR IS FOR A PERIOD OF NINTY (90) DAYS. THE SERIAL NUMBER OF YOUR RADIO HAS BEEN RECORDED. THERE IS NO NEED FOR YOU TO WORRY ABOUT SENDING IN A WARRANTY CARD. THIS PROCEDURE WILL SAVE YOU THE TIME AND POSTAGE NECESSARY TO PROCESS THE NORMAL WARRANTY CARD. WARRANTY PERIOD ON THE FINAL IS 90 DAYS.

AMATEUR-WHOLESALE ELECTRONICS, INC., warrants that all products imported for distribution by them have been manufactured free of defects in design, material, and workmanship. If any product fails to give satisfactory service due to defects covered by warranty, including any warranty implied by law, such as warranties of merchantibility or fitness for a period that is stated above, from the date of original purchase, AMATEUR-WHOLESALE ELECTRONICS, INC. will, at its option, replace or repair the product or any defective part, free of charge, to the original purchaser.

To obtain warranty service, return the product to our service faciltiy, AMATEUR-WHOLESALE ELECTRONICS SERVICE CENTER, 1040 INDUSTRIAL DRIVE, WATKINSVILLE, GA. 30677. THE SERVICE CENTER PHONE NUMBER IS 404-769-8706 OR 404-769-8707. CALLS ARE TAKEN BETWEEN THE HOURS OF 2 AND 4 PM EASTERN TIME. IF YOU RETURN YOUR RADIO YOU MUST OBTAIN A RETURN AUTHORIZATION NUMBER. THAT NUMBER CAN BE OBTAINED AT THE ABOVE NUMBERS FROM 8:30 AM TO 4:00 PM MONDAY THROUGH FRIDAY. ALL RETURNED RADIOS SHOULD BE RETURNED IN THE ORIGINAL PACKING.

IMPORTANT

ALL WARRANTIES ARE VIOD IF THE UNIT HAS BEEN DAMAGED BY ACCIDENT OR UNREASONABLE USE, NEGLECT, IMPROPER SERVICE, OR OTHER CAUSES NOT ARISING OUT OF DEFECTS IN MATERIAL OR WORKMANSHIP; OR IF THE SERIAL NUMBER HAS BEEN ALTERED OR DEFACED. THE MICROPROCESSOR IS NOT WARRANTED IF THE EXTENSION MOD HAS BEEN ATTEMPTED OR COMPLETED.

Warranty service covers only repair or replacement of the product or its components. AMATEUR-WHOLESALE ELECTRONICS, INC. is not responsible for costs, removal or re-installation or shipping to the place of repair. The warranty period is not extended due to repair or replacement.

AMATEUR-WHOLESALE ELECTRONICS, INC. reserves the right to make reasonable charges for service if there is evidence of damage due to alteration, misuse, or installation not according to the enclosed instructions. Alteration of the DC cord is not recommended during the warranty period. Alteration to the cord could void your warranty.

AMATEUR-WHOLESALE ELECTRONICS, INC. is not responsible for damage to other equipment or property, or for any other consequential or incidental damages of any kind, whether based on contract, negligence, or strict libility. The maximum liability shall not in any case exceed the purchase price of the unit. (Some states do not allow limitations on how long an implied warranty lasts with the exclusion of limitation of or consequential damages, so the above limitations and exclusion may not apply to you).

(This warranty gives you specific legal rights. You may also have other rights which vary from state to state).

PROTECT YOUR WARRANTY – DO NOT ENTER YOUR RADIO.   IF YOUR ENTER SEAL IS
BROKEN YOUR WARRANTY MAY BE VOIDED.
HELPFUL HINTS FOR PROGRAMMING THE PCS 6000

1.   PUSH THE POWER SWITCH TO THE OFF POSITION AND THEN TURN THE RADIO BACK ON AGAIN.

2.   THE FIRST FREQUENCY THAT WILL BE ENTERED IS THE RECEIVE FREQUENCY OR THE OUTPUT OF THE
     REPEATER.

3.   TO BEGIN THE OPERATION, PRESS THE / F / BUTTON AND IMMEDIATELY PRESS / M-MODE /.
     THE CHANNEL NUMBER LOCATED IN THE UPPER LEFT HAND CORNER OF THE DISPLAY WILL BEGIN TO
     BLINK.   USE THE UP OR DOWN BUTTON ON YOUR MICROPHONE OR THE UP/DOWN KEYS ON THE FRONT
     OF THE RADIO TO SELECT THE CHANNEL NUMBER YOU WISH TO ENTER YOUR FIRST OR SUBSEQUENT
     FREQUENCY.   AFTER YOU HAVE DETERMINED WHAT CHANNEL YOU WILL BE ENTERING YOUR DESIRED
     FREQUENCY INTO, GO TO THE NEXT STEP.

4.   YOU ARE NOW READY TO ENTER THE RECEIVE FREQUENCY OR THE OUTPUT OF THE REPEATER.   PRESS
     THE / M-MODE / KEY AND THE FREQUENCY WILL BEGIN TO BLINK.   THE FIRST ORDER OF ENTRY IS
     ACTUAL MEGAHERTZ FREQUENCY OR THAT PORTION UNDERLINED IN THE EXAMPLE FREQUENCY (145.000).
     YOU MAY QUICKLY CHANGE THAT PORTION BY PUSHING THE / F / KEY AND IMMEDIATELY PUSHING
     THE UP OR DOWN BUTTON ON YOUR MICROPHONE OR THE UP/DOWN KEY ON THE FRONT OF YOUR RADIO.
     IF YOU WAIT LONGER THAN THREE (3) SECONDS THE "F" WILL DISAPPEAR AND RESET BACK TO 5KC
     INCREMENTS.   AFTER THE MEGAHERTZ FREQUENCY HAS BEEN ENTERED, LET THE "F" DROP AND THEN
     ENTER THE PORTION THAT IS UNDERLINED IN THE FREQUENCY EXAMPLE (145.000).   AFTER YOU HAVE
     ENTERED THE RECEIVE FREQUENCY, GO TO THE NEXT STEP.

5.   IF YOU HAVE PURCHASED THE OPTIONAL SUB TONE DECODER, YOU SHOULD PRESS THE / M-MODE / KEY
     AND ENTER THE CODE REQUIRED TO KEEP THE SQUELCH UNBROKEN.   AFTER THE ABOVE KEY IS PRESSED,
     THE WORD "TONE" WILL APPEAR ON THE DISPLAY.   THE TONE IS ENTERED BY USING THE UP OR
     DOWN BUTTON ON THE MICROPHONE OR THE UP/DOWN KEY ON THE FRONT OF THE RADIO.   ONCE THE
     RECEIVE DECODE CODE HAS BEEN ENTERED, GO TO THE NEXT STEP.   IF YOU DO NOT HAVE A DECODE
     TONE TO BE ENTERED, SIMPLY SKIP THE ABOVE, PUSH THE / M-MODE / AND GO TO THE NEXT STEP.

6.   AFTER THE INSTRUCTIONS IN NUMBER 5 HAVE BEEN COMPLETED, YOU ARE READY TO ENTER THE TRANSMIT
     FREQUENCY OR THE INPUT OF THE REPEATER.   PRESS THE / M-MODE / AND THE FREQUENCY DISPLAYED
     WILL BEGIN TO BLINK.   NOW USE THE SAME METHOD INDICATED IN NUMBER 4 FOR FREQUENCY ENTRY.
     AFTER YOU HAVE ENTERED THE TRANSMIT FREQUENCY, GO TO THE NEXT STEP.

7.   YOU ARE NOW READY TO ENTER YOUR SUB TONE WHICH MAY BE REQUIRED BY SOME REPEATERS FOR
     ACCESS.   PLEASE HAVE THE CODE LISTED IN YOUR MANUAL READY FOR ENTRY.   AFTER YOU HAVE FOUND
     YOUR SUB TONE CODE, PRESS / M-MODE / AND ENTER YOUR SUB TONE CODE.   USE THE UP OR DOWN
     BUTTON ON YOUR MICROPHONE OR THE UP/DOWN KEY ON THE FRONT OF YOUR RADIO TO ENTER THIS CODE.
     AFTER THE TONE CODE HAS BEEN ENTERED, GO TO THE NEXT STEP.

8.   IF YOU DO NOT HAVE ANY OTHER FREQUENCIES TO ENTER AND ARE FINISHED PROGRAMMING YOU MUST NOW
     TURN YOUR RADIO OFF AND BACK ON ABAIN.   THIS FUNCTION DEACTIVATES THE PROGRAMMING
     CAPABILITIES OF YOUR RADIO.   IF YOU WANT TO ENTER ADDITIONAL FREQUENCIES, GO TO STEP
     NUMBER FOUR (4) AND ENTER THE REMAINER OF YOUR FREQUENCIES.   THE RADIO WILL AUTOMATICALLY
     STEP TO THE NEXT CHANNEL NUMBER.   IF YOU WISH TO GO TO ANOTHER CHANNEL NUMBER, RATHER
     THAN THE NEXT NUMBER IN SEQUENCE, YOU MUST PRESS THE UP OR DOWN BUTTON ON YOUR MICROPHONE
     OR THE UP/DOWN KEY ON THE FRONT OF YOUR RADIO UNTIL THE CORRECT NUMBER APPEARS.   IMPORTANT:
     WHEN PROGRAMMING IS COMPLETED YOU MUST TURN YOUR RADIO OFF AND BACK ON AGAIN.

9.   THE PCS-6000 IS VERY USER FRIENDLY BY DESIGN.   PLEASE SPEND A FEW MOMENTS WITH THE MANUAL
     AND YOU WILL FIND THAT PROGRAMMING THE PCS-6000 QUICKLY BECOMES SECOND NATURE!   THANK
     YOU FOR PURCHASING OUR PRODUCT.

     * * * * * * * IMPORTANT NOTICE * * * * * * *   THE MICROPHONE PICTURED ON PAGE – 14 – OF
     YOUR OWNERS MANUAL CANNOT BE PLUGGED INTO YOUR PCS6000.   THE PCM-463 WAS A STANDARD
     ISSUE WITH THE PCS4000. PLUGGING IN THE PCM-463 CAN SERIOUSLY DAMAGE YOUR PCS6000.

     FOR TECHNICAL INFORMATION PLEASE CALL THE SERVICE CENTER AT 404-769-8706.
     THE SERVICE CENTER IS LOCATED AT 1040 INDUSTRIAL DRIVE, WATKINSVILLE,
     GA. 30677.   THE 800 NUMBER CANNOT CONNECT YOU TO THE SERVICE DEPT.   THE
     TWO UNITS ARE NOT LOCATED IN THE SAME BUILDING.